

Abstract:

**Background and aim:** Overactive bladder (OAB) is a common voiding disorder in children (1-2).

According to the latest definition provided by the International Children's Continence Society (ICCS), OAB is a urinary urgency that accompanies with frequency, nocturia and with or without urinary incontinence.

There is little evidence of the role of obesity in the incidence of OAB in children (3-11). Some studies indicate that children with voiding dysfunction are more likely to suffer from obesity and overweight than normal children and also obese children have a higher risk of developing urinary incontinence. It is also explained that the response to treatment in children with a body mass index (BMI) of more than 85 percent of their age and sex is lower than that of children with BMI less than 85 percent. Getting OAB in childhood can be underlie OAB in adulthood.

This study is done according to the importance of detecting the relationship between obesity and OAB and the few studies that are done in this field.

**Methods and findings:** In this study 56 patient's children (18 boys and 38 girls) and also 56 normal children (11 boys and 45 girls) were studied. In patient's group, 2 boys and 11 girls were in low weight group, 7 boys and 28 girls were in normal group, 1 boy and 4 girls in overweight group and 1 boy and 2 girls were in the obese group. There was no significant difference between the frequencies of these groups.

Also in normal children's group, 4 boys and 7 girls were in low weight group, 13 boys and 29 girls were in normal weight group, 1 boy and 2 girls were in overweight group and there was no child in the obese group.

There was no significant difference between the frequencies of these groups.

**Conclusion:** Mean of BMI in the patient group was 15.85 (standard deviation: 3.72) and mean of BMI in the control group was 14.75 (standard deviation: 1.42). According to the P value of 0.04, the difference between the two groups was significant and BMI in the patient group was significantly higher in the control group.

**Key words:** overactive bladder , obesity in childs , overweight in childs